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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,529	03/24/2006	Changling Liu	034226R002	5464
441 7590 03/14/2008 SMITH, GAMBRELL & RUSSELL 1130 CONNECTICUT AVENUE, N.W., SUITE 1130 WASHINGTON, DC 20036				
EXAMINER KATAKAM, SUDHAKAR				
ART UNIT		PAPER NUMBER		
1621				
MAIL DATE		DELIVERY MODE		
03/14/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/573,529

Applicant(s)

LIU ET AL.

Examiner

Sudhakar Katakam

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 3/24/06 12/19/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of the application

1. Applicant's response to the restriction requirement filed on 30th Jan 2008 is acknowledged. However, in view of applicants' arguments, the previous restriction made on 10th Jan 2008 has been withdrawn.

Information Disclosure Statement

2. The examiner has considered applicant's Information Disclosure Statements of 3/24/06 and 12/19/06. Please refer to the signed copies of the PTO-1449 forms attached herewith.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hayase et al** (JP 04182461 A) in view of **O'Mahony et al** (US 6,034,121) and **Fischer et al** (US 6,906,007).

Hayase et al teach a new fungicidal alkoxyiminoacetic acid amide derivative of formula (I), wherein R_1 and R_2 are each hydrogen or lower alkyl, R_3 is lower alkyl, A is hetero ring and optionally substituted by at least one of oxo, halo, phenyl or divalent lower alkylene and B is a bond or $-CH_2-$ group [see Abstract, full translation of article is pending]. **Hayase et al** also teach that A is a coumarine [see compound 51].

Hayase et al also teach the preparation of formula (I) from the formula (II) [see the reaction scheme in page 3].

The difference between the instant claims and the **Hayase et al** is that in the instant claims the coumarine ring is substituted by additional groups. Another difference is **Hayase et al** is silent on the use of the compound as an insecticide. However, **O'Mahony et al** and **Fischer et al** cure this deficiency.

O'Mahony et al teach similar substituted coumarines, in which X is halogen, CN, NO_2 , alkyl etc. in a similar fungicidal compound.

Fischer et al teach that similar coumarines are useful as fungicides and insecticides [col. 32, lines 62-65].

In summary, **Hayase et al** provided sufficient guidance to make the coumarine based fungicides for an ordinary artisan in the art. **O'Mahony et al** showed that in a similar fungicidal compound, in which coumarines can be substituted by various

functional groups. Fischer et al showed a heterocyclic compound which can be used as a fungicide as well as insecticide.

Therefore, a skilled person in the art would be motivated to utilize **Hayase et al** teachings taking the advantage of **O'Mahony et al** teachings to make the instant applicants compound with a reasonable expectation of success, since it is a routine experimental process to add the additional groups on the known compound or core structure for an ordinary skilled person in the art.

Changing such parameters is prima facie obvious because an ordinary artisan would be motivated to explore the analogous compounds through a routine experimentation. Merely modifying the analogous compounds for a known compound is not a patentable modification absent a showing of criticality.

Conclusion

6. No Claim is allowed.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhakar Katakam whose telephone number is 571-272-9929. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter G O'Sullivan/
Primary Examiner, Art Unit 1621